

# Governor's Water Augmentation Council

## Long-Term Water Augmentation Committee

### October 18, 2018 Meeting Summary

**Time: 10:00am – 11:30pm**

**Location: Arizona Department of Water Resources**

#### I. Welcome and Opening Remarks

Chairwoman Maureen George called the meeting to order and welcomed those in attendance.

#### II. Introductions

The following members of the Governor's Water Augmentation Council (GWAC) were present: Wade Noble, Bruce Hallin, Warren Tenney, Sarah Porter, Virginia O'Connell and Holly Richter (for Scott Deeny). In attendance from the consultant's project team were Richard Humphreys, Juliet McKenna, Rupal Pandya, Jim Tress.

#### III. Deliverable 1:1: Summarize Result of Task 1 and Address Questions

The purpose of the Committee meeting, as stated by Chairwoman George, was to; assess the progress, process and work on the Water Augmentation Evaluation Study; to approve advancing the study on to Task 2; and to address the recommended changes to the Scope of Work going forward, such as evaluation factors and augmentation options. Proposed adjustments to the Scope of Work would not warrant any changes in the budget.

Chairwoman George reminded the Committee members to respond to the study's postings on the portal in a timely manner.

##### Review of Task 1 of Statewide Water Augmentation Options Study

Richard Humphreys, Carollo Engineers, presented a review of Task 1, including the three main sections of Technical Memorandum 1: Augmentation Options Definitions, High Level Evaluation, Scoring and Weighting of Evaluation Factors and their associated set of assumptions. Mr. Humphreys' slides can be viewed [here \(right click to open links\)](#) or seen in the accompanied posted recording [here](#).

There was discussion regarding the following:

##### 1. Comments on Technical Memo:

- a. The Committee will review the handout provided in light of today's discussion (copies of the meeting materials are provided [here](#) on the website). Committee members are to discuss with appropriate staff to resolve issues and bring any unresolved items to the next meeting.

##### 2. Status of Technical Memo:

- a. With new information being developed throughout the process, the content of the Technical Memorandum 1 may need to remain flexible to accommodate changes. Therefore, the Committee decided to leave Technical Memorandum 1 in draft form at this time.

#### IV. Present the proposed "revised" Task 2 and 3 Process

There was discussion regarding the original evaluation process:

##### 1. Utilizing category 1 evaluation factors on all 22 options for all 22 Planning Areas

- a. There is not enough information for the options to be evaluated in a meaningful way.

- b. Suggested and agreed upon adjustment to the process is to evaluate the 2-3 most meaningful projects for each Planning Area. This will result in 22-66 projects to evaluate in the more advanced analysis. These projects will then be evaluated with the Category 1 and 2 factors.
- c. Therefore Task 2 is now a task involving defining and describing projects with committee input (see Potential Water Augmentation Projects Brainstorming List posted in Meeting materials here).
- d. Task 3 becomes the actual evaluation process.

There was discussion regarding the project brainstorming list:

1. Mr. Humphreys reviewed a potential list of projects and solicited Committee input based on personal knowledge. (as posted in meeting materials [here](#) )
2. The projects could include more than one augmentation option. The Committee is to submit their ideas to ADWR staff, Cyndi Ruehl via email. The Committee can then add, delete and approve the project list at the next Committee meeting.
3. It was suggested that Carollo also review the *2014 Arizona's Next Century: A Strategic Vision for Water Supply Sustainability* to glean information for projects and definitions.

## V. Committee Review and Approval of Suggested Changes

(see Meeting materials posted on website for more detail [here](#) )

The Committee agreed to the following twelve changes to the Scope of Work and the study's process:

Agreed change from SOW	Discussion & Details
Municipal, Industrial and Agricultural Conservation be classified as a project available to all Planning Areas	Pull these off the list of augmentation options being evaluated. Include private water systems. Do a general qualitative description. Not scored. No more than 1-2 pages of discussion. Include that a target is increasing efficiency.
Aquifer Recharge-Treated Recycled be classified as a project available to Planning Areas with a WWT	Pull aquifer recharge off the list of augmentation options being evaluated. Do a general qualitative description. Not scored. No more than 1-2 pages of discussion. Include that there may be water rights issues involved, such as with urban runoff. Give application parameters for each Planning Area.
Potable and Non-Potable Reuse-Treated Recycled Water be classified as projects available to Planning Areas with a WWT	Pull aquifer recharge off the list of augmentation options being evaluated. Do a general qualitative description. Not scored. No more than 1-2 pages of discussion. Include that there may be water rights issues involved. Give application parameters for each Planning Area
Describe characteristics of Weather Modification without applied evaluation	Pull off the list of augmentation options being evaluated. Half page of general description. Not scored. Weather Modification is very specific to geographical areas and results vary depending on topography and more.
Describe characteristics of Forest Restoration without applied evaluation	Pull off the list of augmentation options being evaluated. Half page of general description. Not scored. Forest Restoration is very specific to

	geographical areas and results vary depending on topography, vegetation and more
Budget to remain the same for task 2 & 3, even though the actual task has changed	
Evaluation criteria (factors) and their associated weights and scores need further review by the committee	A revisit of the evaluation criteria will be in order after the projects are determined, rather than at the front of the project
Identify augmentation projects	a. Committee input of ideas. Projects might include a combination of augmentation options
	b. Project team to identify 1-3 projects per Planning Area and prepare description. NOTE: All Planning Areas might not have 1-3 options
	c. Evaluate groups of planning areas that could benefit from the project
Rearrange some evaluation criteria into more meaningful categories	<ul style="list-style-type: none"> <li>• 'Reduced energy' moves to cat.3</li> <li>• 'Yield' moves to cat. 1</li> <li>• 'Levelized cost per AF' moves to cat.3</li> <li>• 'Land ownership' moves to cat. 3</li> <li>• 'Milestones' eliminated as evaluation criteria</li> </ul>
Change "renewability" as an evaluation factor to "adaptability" Two Evaluation Factors: "cost efficiency" and "economic viability"	"Adaptability" should include the concept of transferability to other Planning Areas. "Cost efficiency" is interchangeable with "levelized cost per AF" and "economic viability" relates to ability to pay. Both cost efficiency/levelized cost per AF AND economic viability will be used in the study
Technical Memorandum 1 is to remain a draft at this time	Any portions of TM1 that are used in the final report will be finalized when the report is prepared

To address the options that were removed from the augmentation options list to be evaluated, the idea put forth was to create a *menu of options* which can be offered to Planning Areas for their regional or local consideration. This list would include conservation, aquifer recharge, potable and non-potable water reuse, weather modifications, forest restoration. Potentially, the following could be added to that *menu of options*: brackish groundwater, urban runoff and infrastructure investment such as well fields and water losses.

## VI. Wrap up

Committee Action Items: November 9

1. Review submitted Technical Memorandum 1 comments. If, after considering changes to the evaluation process and consultant responses, more discussion is required for resolution, submit further discussion to Cyndi Ruehl at [cruehl@azwater.com](mailto:cruehl@azwater.com) or contact Ms. Ruehl to arrange a meeting with ADWR and Carollo. Unresolved comments will be resolved at the next Committee meeting.
2. List potential projects in particular Planning Areas or regional areas that the Committee member is aware of the need and/or the applicability for that area. Submit list to Cyndi Ruehl at

[cruehl@azwater.gov](mailto:cruehl@azwater.gov) by November 9.

3. Review the evaluation criteria factors and submit suggested changes, additions or deletions. Also evaluate the proposed weights and scoring assumptions of the factors in the Technical Memorandum 1, Table 1B-1, pg. 1B-1 and suggest any changes.

## VII. Next Steps and Tentative Schedule

The next meeting to be held around the first week in December after the potential projects list is completed and posted to the ProjectWise portal. Agenda items will include;

- Discussion to resolve comments to the Technical Memorandum 1, if needed
- Review and discussion of List of Projects per Planning Area for deletions, additions and approval to apply to Categories 1 and 2 evaluation criteria for analysis.
- Review and discussion of the evaluation factors; additions, deletions, clarifications, weights and scoring.
- Note: Technical Memorandum 2 will not be reviewed at this meeting since this meeting's purpose is to input and discuss components for that will result in TM2

In view of the adjustments agreed upon at this Committee meeting, Carollo is expecting to produce in Technical Memorandum 2:

- A series of project descriptions that will receive analysis
- Recommended changes needed for evaluation categories 1,2,3
- Address outreach efforts and timing of same

## VIII. Closing Remarks and Next Meeting Dates

Chairwoman Maureen George announced her retirement from the Committee effective December 31, 2018. The next meeting will be scheduled around the first week in December, after time to review the project lists and other material on the Projectwise portal.